

[(Mv>400kD)], TAG 72, bladder carcinoma antigen [(Cancer Res. 49, 6720, 1989)], Mv 48kD colorectal carcinoma antigen, lung carcinoma antigen Mv 350-420kD, Mel-14 epitope, β_2 -microglobulin, Apo-1 epitope, or pan-human cell antigen.

71. (Amended) The method of claim 48, wherein the antibody or antibody fragment is directed against fibronectin receptor, β -integrin, vitronectin receptor, $\alpha\gamma\beta_3$ -integrin, P-selectin, GMP-140, CD44-variants, N-CAM, E-cadherin, Le^y, CEA, EGF receptor, c-erbB-2, HER2, transferin receptor, TNF-receptor, high molecular weight antigen [(HMW 250,000)], p95-100, TP-1 and TP-3 epitope, Mv 200kD, Mv 160kD, MOC-31 epitope, cluster 2 epithelial antigen, MUC-1 antigen, DF3-epitope, gp290kD, prostate high molecular antigen [(Mv>400kD)], TAG 72, bladder carcinoma antigen [(Cancer Res. 49, 6720, 1989)], Mv 48kD colorectal carcinoma antigen, lung carcinoma antigen Mv 350-420kD, Mel-14 epitope, β_2 -microglobulin, Apo-1 epitope, or pan-human cell antigen.

REMARKS

Indefiniteness Rejection

Claims 22, 39, 48, and 71 have been rejected under 35 U.S.C. 112, second paragraph, as allegedly being indefinite. The rejection is traversed to the extent that it is maintained.

The Examiner has not discussed why claims 22 and 48 were considered indefinite. Clarification is requested.

The Examiner stated that claims 39 and 71 contained parenthetical symbols which rendered the claim indefinite. The parenthetical symbols have been removed from the claims.

Withdrawal of the rejection is respectfully requested.

Obviousness Rejections

The present invention consists of adding paramagnetic beads coated with monoclonal antibodies or antibody fragments to a cell suspension of mixed cell populations, where the fraction of target cells is extremely small, down to one target cell per millions of non-target cells. After incubation, the particles will adhere to the target cells. The particles must not be too large because fewer particles will adhere to the target cell, and the binding will be too loose to